Symptom Clusters – the Reality for Patients With Lung Cancer

R. Maguire1, N. Kearney1, K. Stoddart2, P. Flowers1. 1University of Dundee, School of Nursing and Midwifery, Dundee, United Kingdom; 2University of Stirling, Department of Nursing and Midwifery, Stirling, United Kingdom.

Background: The concept of a symptom cluster in cancer nursing was first formally introduced by Dodd et al in 2001. However no study to date has formally explored the lived experience of symptom clusters in patients with lung cancer and this is a significant limitation in this body of research. Materials and Methods: The aim of this study was to explore the lived experience of symptom clusters in patients with lung cancer. Using Intentional Qualitative Analysis (IPA), a qualitative approach stemming from the discipline of health psychology, ten patients with lung cancer were interviewed at two time points: on recruitment to the study and 3–5 weeks later. Data analysis was undertaken using the IPA framework advocated by Smith and Osborn (2003). Results: The findings of the study illustrated the core role of context and meaning in the lived experience of symptom clusters in patients with lung cancer. Despite the participants reporting to be experiencing symptom clusters, many of their dialogues focused on individual symptoms. This focus on sentinel symptoms within the experience of symptom clusters in patients with lung cancer was attributed to the meanings that the individuals ascribed to these key symptoms which in this study were a fear of death, stigma and loss of sense of self. The results of this study highlight that within the experience of symptom clusters, patients with lung cancer do not view all the symptoms that they are experiencing as being of equal weighting, but instead give certain symptoms credence over others based on the meanings that they ascribe to them. Such findings therefore suggest that patients with lung cancer experiencing symptom clusters create a meaning based hierarchy of symptoms, focusing on those that are most meaningful to them within the context of their lives. Conclusion and Recommendation: The results of this study contest the predominantly quantitative measurement of symptom clusters and recommend the subsequent development of meaning-based, patient focused symptom cluster interventions for patients with lung cancer.

Improving the Symptom Experience of Patients With Lung Cancer Receiving Radiotherapy: Advanced Symptom Management System for Radiotherapy (ASyMS-R)

R. Maguire1, N. Kearney1, V. Pedersen2, E. Ream2, A. Richardson3. 1University of Dundee, School of Nursing and Midwifery, Dundee, United Kingdom; 2University of Stirling, Department of Nursing and Midwifery, Stirling, United Kingdom; 3Glasgow Caledonian University, School of Life Sciences, Glasgow, United Kingdom.

Background: Clinical estimates suggest that 70% of patients with lung cancer will receive radiotherapy during their treatment. It is known to experience several symptoms related to both their treatment and disease, (Ekfors et al. 2004;John 2001;Wang et al. 2006) which are associated with reductions in quality of life and overall survival. Therefore effective symptom management is vital in this patient group. However, within the UK there appears to be no standardised means of assessing symptoms in patients with lung cancer receiving radiotherapy (Faithfull et al. 2003), therefore it is likely that symptom management in this patient group may not be optimal. The ‘real time’ monitoring of symptoms using mobile technology may be seen as means of improving the management of symptoms in this patient group.

Aim: Building on previous work (Kearney et al, 2009; Maguire et al. 2008) the aim of this study was to develop a mobile phone based, remote monitoring Advanced Symptom Management System (ASyMS-R) for the management of symptoms in patients with lung cancer receiving radiotherapy and to assess the feasibility and acceptability of the system in clinical practice. The study was conducted in two phases. Phase I developed the ASyMS-R system and phase II evaluated the feasibility and acceptability of ASyMS-R in clinical practice.

Materials and Methods: The study followed a prospective study design, utilizing a mixed methods approach previously advocated for the evaluation of new technologies within healthcare (May et al, 2003). Patients completed an electronic symptom questionnaire on the mobile phone, daily throughout their radiotherapy treatment and for one month post-treatment. Any symptom reports that were of concern, initiated an alert to the nurse at the clinical site, who then viewed a secure web page detailing the patients symptom report and triaged care accordingly. Patient and health professional perceptions of the use of ASyMS-R in clinical practice were assessed using semi-structured questionnaires and interviews pre and post-study.

Results: A total of 16 patients were recruited to the study. Patients using the ASyMS-R system reported positive perceptions of its use in clinical practice, reporting that it helped them to both manage their symptoms and communicate with health professionals. Health professional perceptions were mixed, however overall consensus was that the system was worthwhile and that the vision of using technology as a means of providing care to people with lung cancer was viable.

Conclusion: The use of ASyMS-R is feasible and acceptable to patients with lung cancer receiving radiotherapy and health professionals caring for them. Based on the findings of this study, a number of modifications will be made to accommodate use of this technology in routine clinical practice.

Management of Treatment Related Oral Mucositis With Carbomer Homopolymer a for Radiotherapy and Chemo-radiotherapy Induced Oral Mucositis

J. Daunecy1, J. Greedy1, K. Morgan1, P. Jankowski1. 1Beacon Centre, Oncology; Taunton, United Kingdom

Background: Radiotherapy (RT) and chemo-radiotherapy (CRT) for the treatment of head and neck cancer are well known to produce severe, limiting oral mucositis (OM). Carbomer homopolymer A (MuGard®) has been reported as delaying onset and reducing the severity of oral mucositis. A pilot study was undertaken to assess the efficacy and tolerability of this approach.

Materials and Methods: An historical comparison of consecutive patients requiring RT and CRT for oropharyngeal cancers (OPC) was undertaken, to assess the onset of RTOG Grade 3 OM, opiate analgesic requirements and supplemental feeding. A prospectively reviewed group of OPC patients were assessed for the same criteria, but commenced carbomer homopolymer A (MuGard®) four times daily, from day 1 of treatment until 7 days post treatment. Efficacy and tolerability were assessed during and 7–14 days post-RT by means of oral clinical exam, interview and feedback questionnaire.

Results: The historical comparison group of 15 patients demonstrated median onset of G3 OM in week 3, coinciding with opiate analgesia requirement and nasogastric tube (NGT)/gastrostomy use. 20 patients were prospectively assessed for carbomer homopolymer A (MuGard®) efficacy and tolerability. 4 found the treatment unpalatable or were non-compliant. In the 16 compliant patients, the median onset of G3 OM was 5 weeks with only 2 patients requiring opiate analgesia. The median time for sustained oral intake was week 4 and median onset of nasogastric/gastrostomy feeding was week 5. At 7–14 days post-RT review, oral clinical exam demonstrated 3 patients had G3 OM, 7 had G2 OM, 4 had G1 OM and 2 had G0 OM. Although not assessed against the historical controls, continued follow-up suggested these patients returned more quickly to normal nutritional intake, stable weight and earlier removal of gastrostomies.

Conclusions: This pilot study suggests carbomer homopolymer A (MuGard®) is effective in prevention, delay and management of RT/CRT induced OM, as well as reducing the need for opiate analgesia and NGT/gastrostomy use. However, patient compliance appears essential for maximum efficacy. This pilot warrants further study and may also have applications in the management of chemotherapy-induced mucositis. Additionally to the quality of life implications for the patient, there are potential cost implications in the reduction in OM induced hospital admissions and abandoned treatments.

A Retrospective Analysis of the Use of the Common Toxicity Criteria Tool in Patient Assessment

V. McInerney1, O. Forde2, H. O’Reily2. 1National University of Ireland, HRB Clinical Research Facility, Galway, Ireland; 2University Hospital Galway, Cancer Clinical Trials Unit, Galway, Ireland

Background: Patient assessment and reporting of toxicity plays a central role in oncology research. Accurate reporting and systematic grading of adverse events is important as it reduces the subjectivity of individual interpretation and facilitates data collection. The common toxicity criteria